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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,468	01/28/2004	Frederick W. Giacobbe	Serie 6481	8586
7590	03/13/2006		EXAMINER	
LINDA K. RUSSELL AIR LIQUIDE SUITE 1800 2700 POST OAK BLVD HOUSTON, TX 77070			HOFFMANN, JOHN M	
			ART UNIT	PAPER NUMBER
			1731	
			DATE MAILED: 03/13/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/765,468	GIACOBBE ET AL.
	Examiner	Art Unit
	John Hoffmann	1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 January 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 32-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 32-48 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group II, claims 28-48 in the reply filed on 3 January 2006 is acknowledged. The traversal is on the ground(s) that (1) the Office is required to explain why there would be serious burden, (2) claims 9-13, 15-27 and 29-48 do not require production of rod like stock or stock material to be used in fiber making (as required by subclasses 65/510 and 65/477), (3) the two groups are more properly classified in 65/160 . This is not found persuasive because (1) the Office is not required to explain why there is a serious burden- applicant has provided no authority to support the assertion. The Office's restriction requirement constitutes a *prima facie* showing of a serious burden. Nevertheless, a serious burden very evident. The system could be used to cool, dry, coat or heat fibers, wires, filaments, yarns, string or the like. Such uses are contemplated in a large number of other classes and subclasses. It is quite clear that a complete search of both the method and apparatus would be a serious burden. As to (2) since applicant's system is a part of an apparatus/method that would be classified in 65/510 and 65/477, it is appropriate to classify them as done. But to the degree that the applicant is technically correct, the cooling apparatus and cooling methods would belong in two different classes – which is further evidence of a serious burden. As to (3) – this is incorrect for at least the reason that invention II is a method, and must be classified in a method subclass. Further, as pointed out by applicant, the claims do not require any fiber making – thus the claims do not require any glass working, and therefore would not be classified anywhere in class 65.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

Claim 32 is objected to because of the following informalities: The elements of the preamble need line indents. As indicated in other parts of this action, Examiner has difficulty in interpreting the preamble. Indents should aid in interpretation

From MPEP 608.01 Form of Claims

Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation, 37 CFR 1.75(i).

There may be plural indentations to further segregate subcombinations or related steps.

Appropriate correction is required.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the fiber receiving conduit must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification fails to provide antecedent basis for the "fiber receiving conduit".

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 32: line 12 is not understood. It is unclear whether the line is suppose to say "partitioning the internal passage into a first chamber..." or if there is suppose to be a comma between "passage" and "a" (or if there is some other interpretation). Line 17, there is no antecedent basis for "the inlet port of the first chamber". Line 19, there is no antecedent basis for "the inlet port of the second chamber. Lines 21-23 start out by saying that at least one of the seals is manipulated, and then it is indicated that both the seals are manipulated. It is unclear if both are actually manipulated or not – this also makes it unclear what claim 44 requires.

It is unclear whether claim 32 actually requires cooling by means of the claimed flowing steps – although the preambles indicates that there is cooling, there is no cooling step recited. In claim 36, there is a treating gas – which suggest that one of flowing steps need not cause cooling. Therefore it is unclear if claim 32 implicitly requires cooling by both of the flowing steps.

Claims 42 and 48 require extracting a fluid. Extraction usually means something like withdrawing, pulling, and drawing forth. Applicant describes such page 16, line 8-9 of the specification. However, immediately before that, the specification refers to a mere pressure differential – which would read on having the pressure within the chamber being such that the gas sample is ejected rather than withdrawn/extracted. It is deemed that one of ordinary skill would not be able to ascertain what is meant by *extraction*. One would not be able to ascertain whether one can avoid infringement by transferring the gas but without any withdrawing step. Applicant is reminded that to be their own lexicographer, Applicant must provide an explicit definition.

The specification must clearly set forth the definition explicitly and with reasonable clarity, deliberateness and precision. *Teleflex Inc. v. Ficosa North America Corp.*, 63 USPQ2d 1374, 1381 (fed. Cir. 2002), *Rexnord Corp. v. Laitram Corp.* 60 USPQ2d 1851, 1854 (fed. Cir. 2001) and MPEP 2111.01.

In other words: applicant can apply a new definition to a word only by an explicit definition.

Claim 39 has confusing antecedent basis for the heat exchangers, mediums, chambers and the passage. For example it is unclear if “the internal passage” means all of the exchangers of all the claims share “the internal passage” – or if each has their own. Also claim 39 calls for “exchangers” – it is unclear those are in addition to the exchanger of claim 32; and whether the exchangers of lines 3 and 5 constitute the 4th and 5th exchanger. Also it is unclear if the additional exchangers must be the same as the exchanger of claim 32.

Claim 40: it is unclear if the “are...manipulated” (see last three lines) requires a step of manipulation – or if it signifies they are capable of being manipulated. There is confusing antecedent basis for “the orifice of each adjustable seal” – the only antecedent basis for any orifice pertain to the orifices of claim 32. But that makes little sense. It is not understood how the 3rd and 4th seals can change the dimension of “each” adjustable seal – either the 1st and 2nd, or all four if such orifices are inherent.

At line, 6 of claim 41 “selected” flow rate reads on a nebulous mental step conducted prior to the manipulative steps of the claimed process, hence rendering the present process claim unclear in meaning in scope. If applicant wishes to patent detail

controls over the recited process, the process steps must be positively recited. See Seagram & Sons Inc. vs Marzall, 84 USPQ 180.

The same applies to the threshold value of claims 44 and 48 – see the prior art rejection below.

From MPEP 2173.05(h):

Alternative expressions are permitted if they present no uncertainty or ambiguity with respect to the question of scope or clarity of the claims. One acceptable form of alternative expression, which is commonly referred to as a Markush group, recites members as being "selected from the group consisting of A, B and C." See *Ex parte Markush*, 1925 C.D. 126 (Comm'r Pat. 1925).

Presently, many claims have language which is somewhat similar to the above accepted form, but there is no indication that they are intended to be groups which are "consisting of" the members. Therefore it is impossible for anyone to tell if applicant's group is open or closed to additional members - and thus the claim presents uncertainty or ambiguity with respect to the question of scope of the claim. Or if the claim requires all of the members. If the above "acceptable form" is not desirable for Applicant, Examiner can be telephoned for other expressions. Or if they require each: for example does claim 36 require five different compounds: one silane plus a phosphine plus an organometallic plus fluorine plus chlorine; or does it require only one of those items; or does it require one item from a group which *comprises* those 5 items. But if the group is comprising – it is open to other members, such as oxygen.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 32-35 and 37-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu 6789400

Lu discloses the invention as claimed see figure 4 and the abstract for example. However, Lu does not explicitly recite adjustable seals. Rather, at col. 7, lines 6-9 indicates that the size of the openings can be "tailored". It is deemed that tailoring is substantially the same as adjusting. Alternatively, it would have been obvious to provide the holes as being adjustable, so that one can more easily tailor the openings.

From MPEP 2144.04

D. Making Adjustable

In re Stevens , 212 F.2d 197, 101 USPQ 284 (CCPA 1954) (Claims were directed to a handle for a fishing rod wherein the handle has a longitudinally adjustable finger hook, and the hand grip of the handle connects with the body portion by means of a universal joint. The court held that adjustability, where needed, is not a patentable advance, and because there was an art-recognized need for adjustment in a fishing rod, the substitution of a universal joint for the single pivot of the prior art would have been obvious.).

Lu also does not indicate the adjusting/tailoring be done automatically. It would have been obvious to have them controlled automatically so as to reduce labor costs.

III. AUTOMATING A MANUAL ACTIVITY

In re Venner, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958) (Appellant argued that claims to a permanent mold casting apparatus for molding trunk pistons were allowable over the prior art because the claimed invention combined "old permanent-mold structures together with a timer and solenoid which automatically actuates the known pressure valve system to release the inner core after a predetermined time has elapsed." The court held that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art.).

It would have been further obvious to use a single computer to do all the controlling so that a single operator can control/monitor everything from a single location.

From MPEP 2144.04

B. Making Integral

In re Larson, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965) (A claim to a

fluid transporting vehicle was rejected as obvious over a prior art reference which differed from the prior art in claiming a brake drum integral with a clamping means, whereas the brake disc and clamp of the prior art comprise several parts rigidly secured together as a single unit. The court affirmed the rejection holding, among other reasons, "that the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice."); but see *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983) (Claims were directed to a vibratory testing machine (a hard-bearing wheel balancer) comprising a holding structure, a base structure, and a supporting means which form "a single integral and gaplessly continuous piece." Nortron argued that the invention is just making integral what had been made in four bolted pieces. The court found this argument unpersuasive and held that the claims were patentable because the prior art perceived a need for mechanisms to dampen resonance, whereas the inventor eliminated the need for dampening via the one-piece gapless support structure, showing insight that was contrary to the understandings and expectations of the art.).

The rest of the limitations are clearly evident.

Claim 33: see for example col. 2, lines 22-25 and 45. One would reasonably infer that the same gas composition is used in both caps – each of which has chambers.

Claim 34: Clearly the gases are different gases. Examiner takes Official Notice that a gas cannot be in the same location at the same time.

Claims 35, 37 and 38: see col. 2, lines 45-47.

Claim 39: it would have been obvious to have as many exchangers as needed to cool the fiber: The gas in one exchanger would not be the gas in another exchanger – therefore they have to be different.

From MPEP 2144.04

B. Duplication of Parts

In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) (Claims at issue were directed to a water-tight masonry structure wherein a water seal of flexible material fills the joints which form between adjacent pours of concrete. The claimed water seal has a "web" which lies ** in the joint, and a plurality of "ribs" ** >projecting outwardly from each side of the web into one of the adjacent concrete slabs. <The prior art disclosed a flexible water stop for preventing passage of water between masses of concrete in the shape of a plus sign (+). Although the reference did not disclose a plurality of ribs, the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.).

Alternatively, see col. 7, lines 1-5. One consider various chambers to be other exchangers. As indicated in the 35 USC 112 rejections, it is unclear whether all the exchangers have all of the features of the exchanger of claim 32. It is presumed that the exchangers need not have all of the chambers specified in claimed in claim 32. rather it is presumed any of the chambers 62, 63, 64, 66 etc. can be a heat exchanger. It is inherent that at least some of the heat would be conducted from the fiber in each of those locations because the opening between them. Nevertheless, since the claims do not require any step of exchanging heat, it is presumed that the term "heat exchanger" connotes an intended use, and not any explicit step.

Claim 40 is met because, col 2, lines 22-25 indicates that there can be caps on the top and bottom of the cooler. The inputs could be considered to correspond to orifices.

Claim 41: feature 29 (figure 2 of Lu) is the pump. 16 would correspond to the recycle inlet port. 14 would have the second chamber. 40 or 41 would be the third chamber. The other claimed chambers could be any of the remaining chambers. As to the controller: see col. 4, lines 25-29; since the speed is variable, it is inherent that something controls. And as indicated above, it is not invention to make something adjustable, nor combine features – for example to combine all of the controllers into a single master controller.

Claims 42-43: see col. 4, lines 45-50.

Claim 44 refers to "manipulation". It does not say "THE manipulation" or the like. Instant claim 32 requires an explicit step of "manipulating". Since claim 44 does not indicate that the "the manipulating" adjusts the dimension when the concentration exceeds a threshold value – it is deemed that the claim is not directed to the manipulation of claim 32. Rather it is deemed that the proper interpretation of claim is that it requires the that the controller is capable of adjusting the dimension when the value is above some threshold value. MORE OVER Examiner could find nothing in the specification other than such an interpretation. For example see page 11, lines 10-14 indicates that when the threshold value is exceeded, a seal "can be manipulated". Every other discussion of a gas composition threshold value (that examiner could find) uses the term "can". It is also noted that the specification gives no indication that it cannot be manipulated below the threshold! Thus Lu reads is met for any threshold value 0 ppm, 100 ppm, 3.3 ppm, etc. As indicated above, a threshold value can mean a mental value. The claims do not require that the threshold value be actually inputted by the controller or calculated by it, nor does there appear to be any disclosure of such. Examiner is not in a position to arbitrarily read a limitation into the claim such as a step of adjusting the orifice every time a value is exceed.

Claim 45: as alluded to in the rejection of claim 32 – it is not invention to proved generic automatic adjustment –in particular when the prior art teaches to tailor it.

Claim 46: see col. 4, lines 38-59.

Claim 47 : see the title of Lu.

Claim 48: see how the art was applied to claim 44 above.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lu as applied to claim 35 above, and further in view of Deneka 4792347.

Lu does not teach the gases of claim 36. However it is well known to provide such gases in chambers – in combination with nitrogen and silane so as to prepare the fiber for coating – See Deneka for evidence for such. Examiner is interpreting claim 32 as missing a comma after “passage” in line 12 – because something is missing in the claim to make grammatical sense. With such a reading, the claim requires no physical connection between the second chamber and the rest of the structure. Thus the Deneka chamber can be some distance away. The chamber need not even have a seal. It would have been obvious to provide the Deneka treatment arrangement with the Lu arrangement for the advantages that Deneka teaches.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Whereas applicant correctly points out that the Office indicated allowable subject matter, it has sense been determined no claim allowable. That indication of allowable subject matter is herein withdrawn. Examiner regrets any inconvenience.

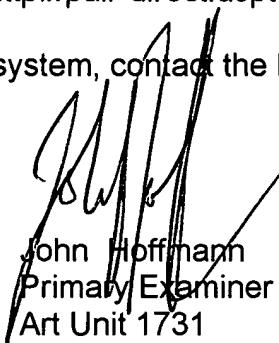
Conclusion

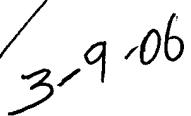
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bazinet, Kuwahara, Strackenbrock, Marcelissen, Aikawa, biswas, Shedletsky and Baksh are other references that examiner found during the search .

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John Hoffmann
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3-9-06

jmh